

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P307856

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CP125-W2A-U-4000K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P307856
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-25-UNV-L82765-S-CP125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB SHEET
Light Source: (168) 4000K TUNABLE CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2311.0 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

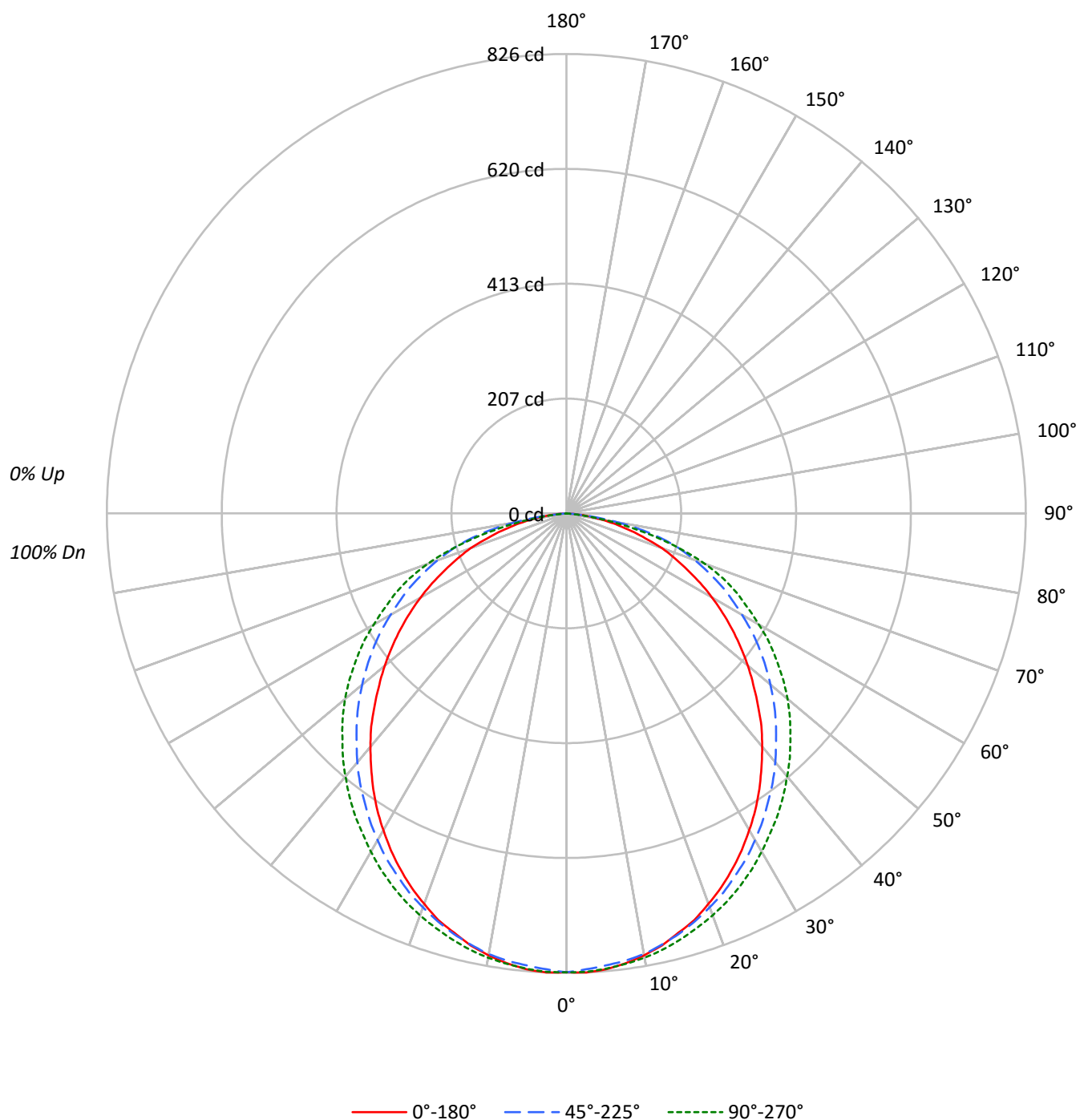
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2220	2220	2220
5°	2222	2204	2219
10°	2204	2198	2217
15°	2174	2180	2209
20°	2139	2159	2202
25°	2096	2133	2195
30°	2044	2108	2183
35°	1987	2078	2176
40°	1924	2053	2170
45°	1853	2028	2167
50°	1784	2005	2173
55°	1710	1989	2167
60°	1628	1961	2152
65°	1532	1955	2152
70°	1442	1939	2091
75°	1251	1894	1787
80°	1012	1526	1190
85°	673	531	355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.9	3.4
10°-20°	221.7	9.6
20°-30°	332.5	14.4
30°-40°	396.7	17.2
40°-50°	410.1	17.7
50°-60°	374.4	16.2
60°-70°	294.6	12.7
70°-80°	171.5	7.4
80°-90°	31.6	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	632.1	27.4
0°-40°	1028.8	44.5
0°-60°	1813.3	78.5
0°-90°	2311.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2311.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	825	825	825	825	825	
5°	823	820	816	823	822	78
15°	780	781	783	793	793	220
25°	706	709	718	736	739	325
35°	605	613	632	657	662	378
45°	487	503	533	563	570	376
55°	364	384	424	455	462	326
65°	241	266	307	331	338	239
75°	120	149	182	179	172	128
85°	22	31	17	14	12	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	825.0	825.0	825.0	825.0	825.0
2.5°	826.1	823.8	820.4	826.1	825.0
5°	822.7	820.4	815.8	822.7	821.6
7.5°	815.8	813.5	811.2	818.1	817.0
10°	806.7	805.5	804.4	812.4	811.2
12.5°	795.2	795.2	794.1	803.2	803.2
15°	780.3	781.4	782.6	792.9	792.9
17.5°	766.6	765.4	768.8	780.3	781.4
20°	747.1	749.4	753.9	767.7	768.8
22.5°	727.6	729.9	737.9	751.7	755.1
25°	705.8	709.3	718.4	735.6	739.1
27.5°	682.9	687.5	700.1	718.4	721.9
30°	657.7	664.6	678.3	698.9	702.4
32.5°	632.5	639.4	656.6	677.2	681.8
35°	605.0	613.0	632.5	656.6	662.3
37.5°	576.3	586.7	609.6	633.6	640.5
40°	547.7	559.2	584.4	609.6	617.6
42.5°	519.1	530.5	558.0	586.7	594.7
45°	487.0	503.0	532.8	562.6	569.5
47.5°	456.0	473.2	506.5	536.2	545.4
50°	426.2	443.4	479.0	509.9	519.1
52.5°	395.3	413.6	451.5	483.5	491.6
55°	364.4	383.8	424.0	454.9	461.8
57.5°	333.4	354.1	395.3	425.1	433.1
60°	302.5	324.3	364.4	394.2	399.9
62.5°	271.6	294.5	335.7	362.1	367.8
65°	240.6	265.8	307.1	331.1	338.0
67.5°	210.8	236.0	276.1	299.1	304.8
70°	183.3	206.2	246.4	263.5	265.8
72.5°	149.0	177.6	216.6	225.7	220.0
75°	120.3	149.0	182.2	178.7	171.9
77.5°	91.7	120.3	142.1	130.6	121.5
80°	65.3	94.0	98.5	81.4	76.8
82.5°	42.4	65.3	55.0	42.4	34.4
85°	21.8	30.9	17.2	13.7	11.5
87.5°	6.9	4.6	2.3	2.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)